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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,186	10/12/2001	Felix G.T.I. Andrew	2980	1415

7590 07/11/2005

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EXAMINER

HANNE, SARA M

ART UNIT	PAPER NUMBER
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2179

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/976,186

Applicant(s)

ANDREW, FELIX G.T.I.

Examiner

Sara M. Hanne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is responsive to the amendment received on April 26, 2005.

Amended Claims 1, 11 and 14 and claims 2-10, 12-13 and 15-24 are pending in the application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 13 and 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The "computer-readable medium" as stated in these claims is defined by the specification as a modulated signal or carrier wave (page 8, line 21) which is incapable of being touched or perceived absent the tangible medium through which they are conveyed. It is recommended that the claims be amended to exclude the limitation "computer-readable medium".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7 and 9-24 are rejected under 35 U.S.C. 103(a) by Sigl, US Patent 6714220 and further in view of Knox, US Patent 6004049.

As in Claim 1, Sigl teaches a system to provide user input using a plurality of software input methods (subset panels) independent of the application program (numeric keypads are common to many applications), each with a panel configured to receive the user input based on user interaction (Figure 2, Ref. 3.2) therewith and a software input method manager independent of the application program (Col. 2, lines 58-61 and Col. 6, lines 15 et seq.) configured to select one of the input methods based on the state of the application program (field selected) to enable the user to interact with that input method to the application program ("help information", Figure 3, Ref. 3.5 and 3.6). While Sigl teaches the plurality of software input methods selected according to the application program state, they fail to show a plurality of application programs excluding the software input method as recited in the claims. In the same field of the invention, Knox teaches a software input method manager (keyboard applet, RPC and virtual machine) with a plurality of software input methods similar (keyboard layouts) to that of Sigl. In addition, Knox further teaches a plurality of application programs to which the plurality of input methods are applicable (application 112, Col. 5 line 25 et seq.). It would have been obvious to one of ordinary skill in the art, having the teachings of Sigl and Knox before him at the time the invention was made, to modify the software input system for using different input panels configured to receive user input, wherein the independent method manager selections the method based upon a state of the application program to enable user interaction with the panel to provide input taught by Sigl to include the multiple application programs beyond the software input method manager of Knox, in order to obtain a multiple input method independent from multiple

application programs using an application program state to determine which input method to present to the user. One would have been motivated to make such a combination because an adaptable input system for all computer programs would have been obtained, as taught by Knox.

As in Claim 2, Sigl teaches the application program to communicate the state to the SIP method manager (Column 3, lines 1-9).

As in Claim 3, Sigl teaches a component external to the application program to determine the state of the application program and communicates the state to the SIP method manager (Column 6, line 51 et seq.).

As in Claim 4, Sigl teaches the application program state corresponding to the field having input focus (Column 2, lines 42-44).

As in Claim 5, Sigl teaches the application program communicating data corresponding to the field to the SIP method manager where the SIP method manager selects the input method based on the data (Figure 3, Ref. 3.3).

As in Claim 6, Sigl teaches the state of the application program corresponds to a field having input focus (Col. 4, line 30) and where the SIP method manager selects the input method based on the data corresponding to the field (Figure 3, Ref. 3.3).

As in Claim 7, Sigl teaches the application program communicating key related data to the SIP method manager which configures some keys of the input panel are based on the key related data (Figure 3, Ref. 3.4 and 3.5).

As in Claim 9, Sigl teaches the key-related data to include a string corresponding to a meaning of a variable key (the specified key is a string).

As in Claim 10, Sigl teaches a database of previous use input information, such that the software input method configures some keys on the input panel based on the previous user input information (previous use for the selected field).

As in Claim 11, Sigl teaches a computer implemented method for receiving application program state data at a software input method manager (Figure 3, Ref. 3.2), the software input method manager independent of the application program (Col. 2, lines 58-61 and Col. 6, lines 15 et seq.), selecting an input method from the software input methods (Figure 3, Ref. 3.3), each software input method independent of the application program (numeric keypads are common to many applications), and having an input panel configured to receive user input based on user interaction (Figure 3, Ref. 3.5 and 3.6), and returning key data to the application program corresponding to user interaction with the input panel (Figure 3, Ref. 3.8), the input panel having a displayed key that when actuated returns a string of at least two characters to the application program (the ok button returns the string in Ref. 2.3 of Figure 2). While Sigl teaches the plurality of software input methods selected according to the application program state, with a key which when actuated returns a string of characters, they fail to show a plurality of application programs excluding the software input method as recited in the claims. In the same field of the invention, Knox teaches a software input method manager (keyboard applet, RPC and virtual machine) with a plurality of software input methods similar (keyboard layouts) to that of Sigl. In addition, Knox further teaches a plurality of application programs to which the plurality of input methods are applicable (application 112, Col. 5 line 25 et seq.). It would have been obvious to one of ordinary

skill in the art, having the teachings of Sigl and Knox before him at the time the invention was made, to modify the software input system for using different input panels configured to receive user input, wherein the independent method manager selections the method based upon a state of the application program to enable user interaction with the panel to provide input with a key which when actuated returns a string of characters taught by Sigl to include the multiple application programs beyond the software input method manager of Knox, in order to obtain a multiple input method independent from multiple application programs using an application program state to determine which input method to present to the user. One would have been motivated to make such a combination because an adaptable input system for all computer programs would have been obtained, as taught by Knox.

As in Claim 12, Sigl teaches receiving key configuration data in relation to the selected input method and configuring a keys on the input panel are based on the key configuration data (See Claim 7 rejection *supra*).

As in Claim 13, Sigl teaches a computer-readable medium having computer-executable instructions (Column 3, lines 1-9).

As in Claim 14, Sigl teaches a computer implemented method for receiving application program state data at a software input method manager that is independent of the application program corresponding to the application program state data (Col. 2, lines 58-61 and Col. 6, lines 15 et seq.), selecting an input panel based on the application program state data, the input panel independent of the application program, displaying keys on the input panel to enable user interaction with the input panel, and

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returning key data to the application program corresponding to user interaction with the input panel (See Claim 11 rejection *supra*). While Sigl teaches the plurality of software input methods selected according to the application program state, they fail to show a plurality of application programs excluding the software input method as recited in the claims. In the same field of the invention, Knox teaches a software input method manager (keyboard applet, RPC and virtual machine) with a plurality of software input methods similar (keyboard layouts) to that of Sigl. In addition, Knox further teaches a plurality of application programs to which the plurality of input methods are applicable (application 112, Col. 5 line 25 et seq.). It would have been obvious to one of ordinary skill in the art, having the teachings of Sigl and Knox before him at the time the invention was made, to modify the software input system for using different input panels configured to receive user input, wherein the independent method manager selections the method based upon a state of the application program to enable user interaction with the panel to provide input taught by Sigl to include the multiple application programs beyond the software input method manager of Knox, in order to obtain a multiple input method independent from multiple application programs using an application program state to determine which input method to present to the user. One would have been motivated to make such a combination because an adaptable input system for all computer programs would have been obtained, as taught by Knox.

As in Claim 15, Sigl teaches receiving data corresponding to a communication from the application program (See Claim 2 rejection *supra*).

As in Claim 16, Sigl teaches receiving data corresponding to a communication component external to the application program (See Claim 3 rejection *supra*).

As in Claim 17, Sigl teaches the selecting an input panel to comprise loading an input method (Figure 3, Ref. 3.4 and 3.5).

As in Claim 18, Sigl teaches the selecting an input panel to comprise notifying a loaded input method (popup window 2.1).

As in Claim 19, Sigl teaches receiving key configuration information corresponding to the state, and configuring keys on the input panel are based on the key configuration data (See Claim 7 rejection *supra*).

As in Claim 20, Sigl teaches receiving key configuration information comprising receiving data corresponding to a communication from the application program (See Claim 2 rejection *supra*).

As in Claim 21, Sigl teaches configuration information comprising receiving data corresponding to a communication from a component external to the application program (See Claim 3 rejection *supra*).

As in Claim 22, Sigl teaches receiving data corresponding to a communication from a database (the stored keys are a database).

As in Claim 23, Sigl teaches returning a string of at least two characters in response to a single displayed key being actuated (the ok button returns the string in Ref. 2.3 of Figure 2).

As in Claim 24, Sigl teaches a computer-readable medium having computer-executable instructions (See Claim 13 rejection *supra*).

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6. Claim 8 is rejected under 35 U.S.C. 103(a) as being anticipated by Sigl, US Patent 6714220, and Knox, US Patent 6004049 and further in view of Cobbley et al. US Patent Application Publication 2002/0085038.

Sigl and Knox teach the method of Claims 1-7 as seen *supra*. While Sigl teach the sending of key related data with the multiple input methods along with Knox's teachings of application programs, they fail to show the use of XML format used to communicate the key-related data to the software input method as recited in the claims. Cobbley et al. teaches a keyboard similar to that of Sigl and Knox. In addition, Cobbley et al. further teaches using of XML format to communicate key related data ("text entry blocks may use particular coding such as hypertext markup language (HTML) coding or other languages including extensible mark up language (XML)", Paragraph 15). It would have been obvious to one of ordinary skill in the art, having the teachings of Sigl and Knox and Cobbley et al. before him at the time the invention was made, to modify the key-related data communication for multiple applications taught by Sigl and Knox to include the usage of the XML format of Cobbley et al., in order to obtain the transmitting of key-related data using XML format. One would have been motivated to make such a combination because an Internet capable input system would have been obtained, as taught by Cobbley et al.

Response to Arguments

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

In response to the arguments regarding the 101 rejection, the examiner disagrees. *In re Lowry* and *In re Warmerdam* support "computer readable medium" where "computer readable medium" because it had not been defined in the specification to include limitations that were not tangible. Furthermore the argument on page 10 of the remarks filed 4/26/05 goes on to state that "Carrier waves and modulated signals are examples of data that may be interpreted by a computer (i.e., a computer-readable medium). This statement is contradictory in that the computer-readable medium is defined in the spec as a carrier wave and/or modulated signal. These elements are not interpreted by a computer in the claimed subject matter and cannot be held therefore they are not tangible entities. *In re O'Reilly* and *In re Breslow* refer to signals as being proper transitory subject matter but do not support statutory limitations. As to the arguments regarding *Arrhythmia Research Technology, Inc. v. Corazonix Corp.*, the decision does not address that signals are statutory. The claims at issue in *Arrhythmia* are a process claim and an apparatus claim and the discussion deals with what makes a process or an apparatus non statutory.

The claims should be presented in a way that more clearly describes how the input methods are independent of each of the application programs since the claims go on to state the "the input methods based on a state of one of the application programs".

In response to the arguments regarding Sigl, the examiner disagrees. Sigl teaches a handheld implemented system in which programs such as the main plant control system application and the help information program. As suggested in the description of the invention, the invention is created not only for chemical plant

programs, but for any palmtop device application requiring data input, in order to save display space. The chemical plant program is only one implementation and the method need not be specific to chemical plants. Furthermore, Knox has been incorporated into the rejection to more explicitly illustrate how a input method manager works with multiple application programs to show that this limitation is not new.

In response to the argument that Sigl does not teach an input method manager independent of the application program, the examiner disagrees. Sigl shows the separate instruction describing the separate programs, and when the help application is needed it is dynamically called upon, it is not constantly running along with the plant control system application. Furthermore, Knox also teaches this limitation.

In response to the argument that Sigl does not teach Claim 3's limitation that components external to an application program determine the state of the application program the examiner disagrees. The previous argument applies here as well as the argument that a user could be a component external to the application program, as well as a mouse input control program.

In response to applicant's argument that the references fail to show a database of previous user input information, wherein the software input method (that is independent of the application program) configures some keys on an input panel', the examiner disagrees. The user sets limit values in the interface of Figure 1 that are stored in database memory (Figure 4). These values are used to dynamically configure which keys will be presented on the input panel.

Conclusion

7. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach choosing an input device according to application program information and configuring keys based on prediction methods and such.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara M. Hanne whose telephone number is (571) 272-4135. The examiner can normally be reached on M-F 7:30am-4:00pm, off on alternating Fridays.

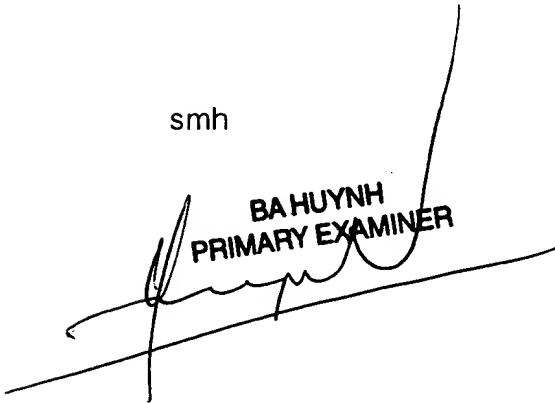
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

smh

**BA HUYNH
PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Ba Huynh', is written over a horizontal line. The signature is stylized and cursive.